



US005994455A

United States Patent [19][11] **Patent Number:** **5,994,455****Mück et al.**[45] **Date of Patent:** **Nov. 30, 1999**

[54] **PROCESS FOR THE PREPARATION OF
THERMALLY STABLE
POLYOXYMETHYLENE COPOLYMERS**

[75] Inventors: **Karl-Friedrich Mück**, Weisbaden;
Horst Röschert, Ober-Hilbersheim,
both of Germany; **Robert M. Gronner**,
Nueces, Tex.; **Satyajit Verma**; **Michael**
G. Yearwood, both of Nueces, Tex.

[73] Assignee: **Ticonna GmbH**, Germany

[21] Appl. No.: **09/149,795**

[22] Filed: **Sep. 8, 1998**

[51] Int. Cl.⁶ **C08K 5/41; C08G 4/00**

[52] U.S. Cl. **524/745; 528/232; 528/241;**
528/242; 528/244; 528/248; 528/249; 528/250;
524/701; 524/706; 524/713; 524/730; 524/792

[58] Field of Search **528/232, 241,**
528/242, 244, 248, 249, 250; 524/701,
706, 713, 730, 745

[56] **References Cited**

U.S. PATENT DOCUMENTS

5,144,005 9/1992 Sextro et al. 528/480

FOREIGN PATENT DOCUMENTS

6-92475 8/1992 Japan .

Primary Examiner—Samuel A. Acquah

Attorney, Agent, or Firm—Connolly Bove Lodge & Hutz

[57] **ABSTRACT**

A process for the preparation of polyoxymethylene copolymers, wherein 1,3,5-trioxane is polymerized with generally known comonomers in the presence of a strong protonic acid initiator and in the presence of a formaldehyde dialkyl acetal, and wherein the initiator is dissolved in the formaldehyde dialkyl acetal before admixing to the trioxane and the comonomers.

8 Claims, No Drawings

